Impediments to Wide-Spread Adoption of Functional Languages

CUFP 2007

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The Plan

- The commercial failure of functional languages

- Risk versus return: the essential barrier to adoption

- The pipeline model of language adoption

- Nuturing the stages of the pipeline

First, a little game...

The Commercial Failure of Functional Languages

Do We Care?

Industry benefits from academia

Academia benefits from industry

The Essential Barrier to Adoption

Risk versus Return

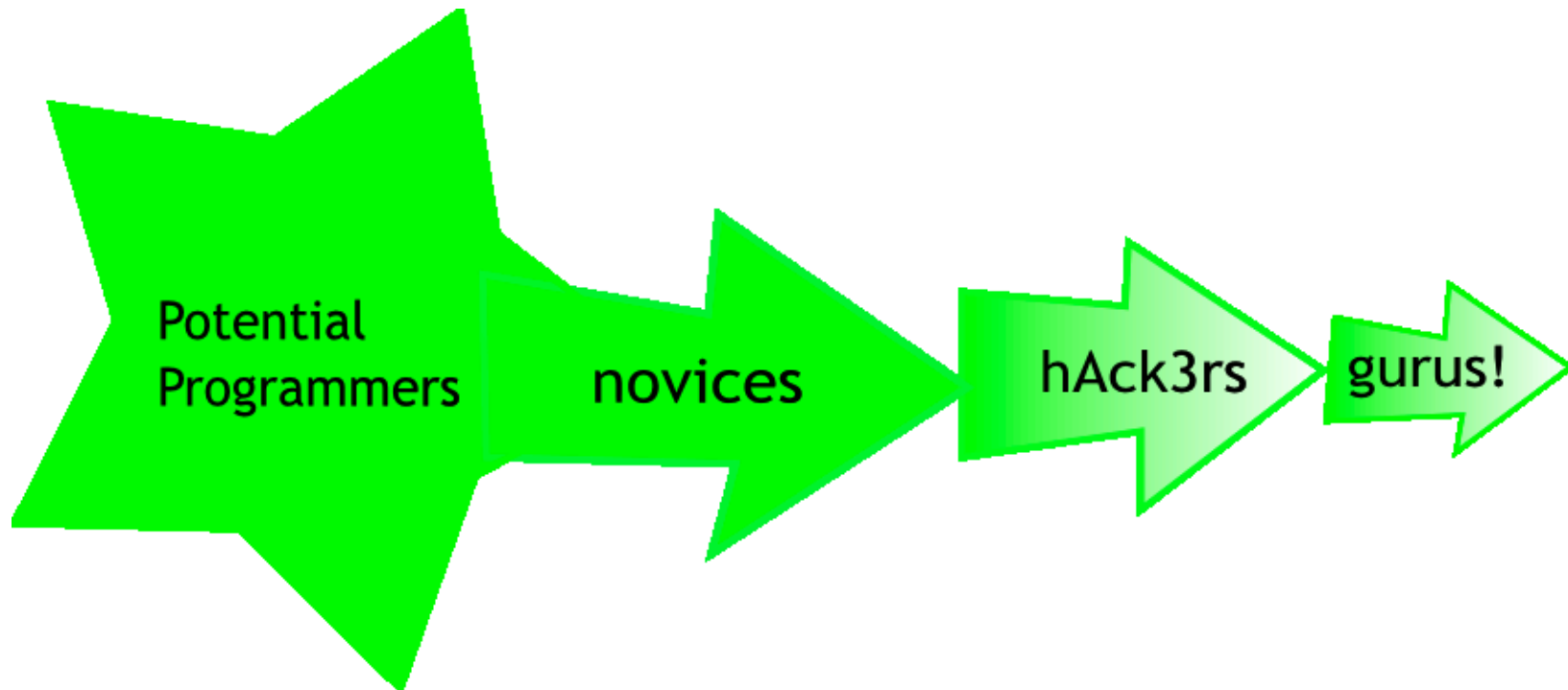**It is that simple**

A New Hope?

Hold conferences at snow-boarding locations?

A New Hope?

OR

Make it easier for small businesses, startups, and experts to get proficient

Pipeline Model of Language Acquisition

Acquiring Novices

People Program To Solve Problems

Python vs Haskell

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"Haskell is a general purpose, purely functional programming language featuring static typing, higher order functions, polymorphism, type classes, and monadic effects. Haskell compilers are freely available for almost any computer."

Developing Novices

- Generally lots of material (undergraduate texts)

- Possibly not great for working programmers, but probably good enough

Self-Development for Gurus

- Well accommodated (ICFP etc...)

Nuturing Your Hackers

- The gaping hole left by academia

- Few texts

- Few libraries

- Few venues

So What Ya Gonna Do?

- The non-profit for fun and profit

- Tried and tested model

Texts

- Encourage a culture of documentation. Make documentation easy.

- Provide central repository of links

- Things will grow incrementally...

Libraries

- Central repository

- Look at PLaneT `http://planet.plt-scheme.org/`

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Better is Worse Conferences

- Academic conferences intimidating

- Originality too high a barrier

Ruby Conferences, 2007

- RubyConf

- EuRuKo

- MountainWest RubyConf

- Michigan Ruby Conference

- Ruby Hoedown

- Gotham Ruby Conference

- Silicon Valley Ruby Conference

- Plus Rails conferences (at least 3), plus tracks at, for example, O'Reilly events

Worse is Better Conferences

- Lower standard

- Include practicals, 'how to contribute', learning sessions

- Consider small grants for conferences

User Groups: The Mini-Mini Conference

- User groups are just ongoing conferences

A Simple Plan for Happiness

- Setting up a non-profit is easy

- Implementing my suggestions is easy

- Getting community contributions is easy

It Ends on a Major Chord

Industry benefits from academia

Academia benefits from industry

Credits